

## Session 8B: Post Class tests

1. The pre-tax cost of debt is a component in the cost of capital. Which of the following best describes what you are trying to estimate, in this calculation?
  - a. The actual cost on the company's existing debt
  - b. The cost of borrowing on just the company's safest debt
  - c. The cost of borrowing on the company's most expensive debt
  - d. The cost of borrowing money today, based upon the maturity of the actual debt of the firm
  - e. The cost of borrowing money today, on long term debt
2. Which of the following statements about the pre-tax cost of debt is **not true**?
  - a. The pre-tax cost of debt for a company will always be higher than the risk free rate, in any currency
  - b. The pre-tax cost of debt for a company will fall, if the risk free rate falls
  - c. The pre-tax cost of debt for a company will increase, if the default risk in the company increases
  - d. The pre-tax cost of debt for a firm can be computed by looking at its peer group firms' cost of debt (like a bottom up beta)
  - e. All of them
3. You are trying to compute the market value of debt for a company that has only bank loans. The company has \$2.5 billion in face value of debt and made interest expenses of \$100 million on this debt last year. If the weighted average maturity of the debt is five years, and the company's current pre-tax cost of debt is 5%, estimate the market value of debt. (You can assume annual interest payments)
  - a. \$1.96 billion
  - b. \$2.00 billion
  - c. \$2.39 billion
  - d. \$2.50 billion
  - e. \$3.00 billion
4. The government confers a tax benefit on companies that borrow money. To compute this tax benefit for a company with taxable income, which of the following tax rates should you be using?
  - a. The cash tax rate (Cash taxes paid/ Taxable income)
  - b. Effective tax rate (Accrual taxes paid/Taxable income)
  - c. Marginal tax rate (Tax rate on the last dollar of income)
  - d. Industry-average tax rate
  - e. None of the above
5. Assume that you are computing the cost of capital for a company whose only debt is 10-year convertible debt, with a face value of \$300 million and a coupon rate of 0%. The company has a BBB bond rating, which results in a default spread of 2% over the riskfree rate (which is 3%). If the market value of the convertible bond is \$400 million, what is the breakdown for debt and equity in this convertible bond?
  - a. \$400 million in equity, no debt (because coupon is zero)

- b. \$216 million in equity, \$184 million in debt
- c. \$154 million in equity, \$246 million in debt
- d. \$177 million in equity, \$223 million in debt
- e. \$100 million in equity, \$300 million (face value) in debt
- f. \$0 in equity, \$400 million in debt (because it has not been converted)